

REMARKS

Claims 85-118 are pending in the present application. Claims 29-84 have been canceled. Support for claims 85-118 may be found in previously pending claims 29-84 and generally throughout the specification.

Applicants would like to thank Examiner Schnizer for his time and consideration of the present application at the interview with the undersigned agent. At the interview, the issues raised in the outstanding Official Action were discussed.

The specification was objected to for containing alterations. The Official Action alleged that a new declaration was required. However, applicants believe that the alterations in the specification were a result of a printer error. As a result, applicants do not believe that the alterations need to be initialed and/or dated as required by 37 CFR 1.52(c).

In the outstanding Official Action, claims 29, 31-41, 44-47, 49, 51-62, and 64-84 were rejected under 35 USC 112, second paragraph, as allegedly being indefinite. Applicants believe that the present amendment obviates this rejection.

As noted above, claims 29-84 have been canceled. Applicants believe that claims 85-118 have been drafted in a manner so as to obviate the indefiniteness rejection. Indeed, the formulas set forth in claims 84-118 clearly recite the constituents in which the claimed phosphoepoxides are attached.

Claims 29 and 31-41 were rejected for reciting the phrase "an effective amount of a compound, at least one phosphoepoxide group". However, claims 85-118 have been drafted in a manner so that this phrase is no longer recited in the claims.

The Official Action rejected claims 44, 46, 51, 53, 66, 68 and 79 for reciting the chemical structures "X" and "Y". The Official Action stated that the claims failed to define "X" or "Y". However, applicants believe that claims 85-118 have been drafted in a manner so as to obviate this contention. The claims clearly recite each compound and its corresponding formula. As a result, applicants believe that the new claims have been drafted in a manner so as to clearly define all groups and substituents. As a result, applicants believe that these recitations are definite to one of ordinary skill in the art.

Claims 44, 46, 51, 53, 66, 68, and 79 were rejected as allegedly being indefinite for reciting the term "a substituent which does not prevent formation of a halohydrin function  $X-CH_2-C(OH)(R_1)$ ". The Official Action alleged that the recitation was unclear because the subject matter was identified by what it was not, rather than by what it was. However, applicants note that this recitation no longer appears in the claims. For example, the Examiner's attention is respectfully directed to claim 97, wherein  $R_2$  is a substituent selected from compounds allowing the

formation of specific compounds. As a result, applicants believe that the recitation is definite to one of ordinary skill in the art.

Claim 56 was allegedly indefinite for reciting "a general route". However, as noted above, claim 56 has been canceled. Moreover, applicants note that this phrase no longer appears in the claims.

Claim 65 was found indefinite because it did not end in a period. However, claim 65 has been canceled and applicants believe that all the claims end in a period.

Claim 74 was rejected for reciting the phrase "injection diseases". However, the claims have been drafted so this phrase no longer appears in the claims.

As to claims 75-81, the Official Action alleged that the term "cells sensitive to Ty982 lymphocytes" was unclear. This phrase no longer appears in the claims. Applicants note that the claims are directed to compounds and methods for activating Ty982 lymphocytes by contacting the lymphocytes with an effective amount of the claims compounds.

In view of the above, applicants believe that claims 85-118 are definite to one of ordinary skill in the art.

Claims 30, 43, 44, 48, 50, 51, 58, 63, 65, 66, and 75-81 were rejected under 35 USC 112, first paragraph, as allegedly

containing new matter. Applicants believe that the present amendment obviates this rejection.

In imposing the rejection, the Official Action alleged that the formulas represented in the claims represented new matter. Upon reviewing the specification, applicants note that the structures did contain an informality in that they recited an extra oxygen atom. As suggested by the Examiner, the claims have been drafted to recite the proper structures. Applicants would like to thank the Examiner for a suggestion as to how to overcome this rejection.

Claim 58 was rejected for being directed to sterile buffer at pH 7. The Official Action alleged that the specification does not provide support for the utilization of any sterile buffer at pH 7. While applicants traverse the contention that this represents new matter, in the interest of advancing prosecution, this recitation has been removed from the claims. Claim 103 recites a "sterile phosphate buffer at pH7".

The Official Action also rejected claim 74 for reciting the term "injection diseases". The Official Action alleged that the term was not present in the specification or claims as filed and represents new matter. While applicants believe that the overall disclosure of the present application supports this term, applicants note that the claims have been drafted in a manner so

that this term is no longer recited. Thus, applicants believe that this rejection has been obviated.

Claims 44, 46, 51, 53, 66, 68 and 79 were rejected under 35 USC 112, first paragraph, as allegedly being based on an insufficient written description.

The Official Action alleged that these claims were described by functional limitations rather than by structural limitations. However, as noted above, claims 44, 46, 51, 53, 66, 68 and 79 have been canceled. Applicants believe that claims 85-118 are clearly supported by the present disclosure. Indeed, applicants note that the structures recited in claims 85-96, 98-106 and 116-118 are clearly recited. As to claims 97 and 107-115, applicants note that while some of the compounds are identified by the manner in which they allow formation of a compound of specific formulas, the specific formulas are recited. Indeed, the Examiner's attention is respectfully directed to pages 11-18 of the present specification. The criteria by which a compound can be selected as a starting compound and the counter-reaction required are plainly recited. Thus, applicants believe that claims 85-118 are clearly supported by the present disclosure.

Claims 47, 47, 54-57 and 59 were rejected under 35 USC 102(b) as allegedly being anticipated by MUEHLBACHER et al. Claims 47-58 were then further rejected under 35 USC 103(a) as

allegedly being unpatentable over MUEHLBACHER et al. Applicants believe that the present amendment obviates these rejections.

MUEHLBACHER et al. is directed to diphosphoepoxide compositions. MUEHLBACHER et al. does not disclose or suggest that these compositions can be used to activate lymphocytes.

Claims 85-95 are directed to a method for activating lymphocytes by contacting the lymphocytes with an effective amount of a diphosphoepoxide compound. While claims 96-106 are directed to compounds, these compounds are directed as triphosphoepoxides. Claims 107-114 are directed to further methods of activating lymphocytes. Claim 115 is directed to a process for producing triphosphoepoxide compounds. Claim 116 is directed to a compound of formula (5). Claim 117 is directed to a composition comprising triphosphoepoxides and claim 118 is directed to a method for activating lymphocytes. Thus, applicants believe that MUEHLBACHER et al. fails to disclose or suggest the claimed invention.

In view of the present amendment and the foregoing remarks, therefore, it is believed that this application is now in condition for allowance, with claims 85-118, as presented. Allowance and passage to issue on that basis are accordingly respectfully requested.

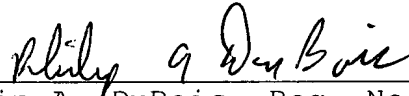
The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

Application No. 09/786,055  
Amdt. dated February 27, 2004  
Reply to Office Action of August 27, 2003  
Docket No. 0509-1019

overpayment to Deposit Account No. 25-0120 for any additional  
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



---

Philip A. DuBois, Reg. No. 50,696  
745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

PD/fb